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(54) Title: OLIGONUCLEOTIDES FOR DETECTION OF LEISHMANIASIS AND METHODS THEREOF

(57) Abstract: The present invention relates to a novel oligonucleotide primers having SEQ ID NO: 1, SEQ ID No: 2, SEQ ID NO: 3 and SEQ ID NO: 4 for amplification of the kinesin-related gene of Leishmania species. The invention also provides a method for detecting and differentiating visceral leishmaniasis (VL) and post kala-azar-dermal leishmaniasis (PKDL) causing strains of Leishmania donovani in a sample, comprising isolating DNA from a sample; amplifying the target region from the DNA using novel oligonucleotide primers and heat stable DNA polymerase to obtain amplified fragments; separating the amplified fragments and analyzing the fragments to detect and differentiate VL and PKDL causing strains of Leishmania donovani based on the banding pattern of the amplified fragments. In addition, the invention provides a diagnostic kit for detection and differentiation of VL and PKDL causing strains of the Leishmania donovani.

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